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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/640,104	08/15/2000	Dirk Adolph	RCA 89,739	1502

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THOMSON LICENSING INC.
PATENT OPERATIONS
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EXAMINER

BOCCIO, VINCENT F

ART UNIT	PAPER NUMBER
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2621.

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/640,104

Applicant(s)

ADOLPH ET AL.

Examiner

Vincent F. Boccio

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment of 10/16/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/16/2006 have been fully considered but they are not persuasive.

{A} In re page 11, applicant states, "Duruo, all frames are decoded and stored in frame buffers. During trick modes in Duruo frames are decoded and stored in frame buffers."

In response the examiner agrees, but, claim 4 only recites decoding B frames without storing its contents in a frame buffer, which the examiner agrees to perform smooth reverse mode trick mode it is done, but, the examiner renders obvious B frames not stored in a frame buffer, which the frame buffer location/placed, after the MPEG decoder, which in forward trick the examiner renders obvious, as being well known not to be required, but, advantageous in reverse fast trick mode, as illustrated by Duruo and other known art to the examiner.

{B} In re page Duruo absolutely fails to teach or suggest or anticipate at least "editing for playback in trick mode the digital data stream using said history, as taught by applicant's specification.

The scope is determined by the claims, not the specification, the examiner agrees that the specification if claimed in detail would overcome Duruo, but the claims are not deemed distinguishable.

Duruo does initiate a trick mode using the history data, during that mode causes, as claimed, "decoding the digital data stream", edited for trick mode (Fig. 1, Fig. 6, "History 35 & GOP 41" and Fig. 7, holding multiple frames, col. 7-8, "5 such buffers", col. 4, fast reverse).

Based on above, if the buffer only holds for example 5 frames, which can be a GOP or GOP frames, if fast reverse trick mode is to be accomplished and the buffer holds 5 frames, it is clear that frames are decoded after using the 5 frames from the buffer frames for fast reverse operation would be read from the medium, rather than the buffer to perform fast trick play reverse.

{C} In re page 12, applicant states, "the GOP history is used to edit the bit stream by using the GOP history to position a pickup to select a proper position."

In response the examiner agrees that the specification supports the argument but, the claims fails to recite any

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limitation of the history used to position the head for reading, editing or picking images for trick modes.

2. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "position a pick-up") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The only pickup limitation is cited in claims 13, 14, but, only recites a pick-up (head) controlled coupled to the trick controller (since the system does trick modes it is a trick controller by default), deemed met by the art applied.

The examiner recommends narrowing/amending the claims to further define, how the pickup is directed based in the history data, this difference clearly claims would overcome the prior art applied.

Also the examiner suggests that since Duruoaz has history as best can be said corresponding to one GOP, it seems clear applicant can claim that the history is more than one GOP history data, as understood, while Duruoaz has a less history data than the invention in the specification, as understood by the examiner.

Claiming that the history is or can be used from the beginning of the playback stream, having history for more than one GOP, the examiner believe is claimed correctly would overcome Duruoaz.

Presently the claims are deemed to broad to overcome Duruoaz as applied.

The examiner offers assistance to applicant upon a request for a consultation of the differences to amend the claims to overcome the art applied.

Further it is noted that the drawing provided fails to show a path allowing for a bypass of the frame buffer on the output of the decoder.

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The examiner reminds applicant to, "not overshoot" or introduce new matter, from what is envisaged on the day of filing this application.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5-10, 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Duruoz et al. (US 6,654,539).

Regarding claim 1, Duruoz et al. discloses and meets the limitations associated with a method and a corresponding apparatus for reproducing (Fig. 1, playback device 13, 15) a digital stream containing program information for trick mode display, the method comprising the steps of:

a) decoding the incoming stream in normal mode (Fig. 1, video decoder 19);

b) creating a group of picture (Fig. 6, GOP) structure history during the decoding step;

c) storing the history (Fig. 6, "History Value", Fig. 16 C, 552, 586, 566, 568, HISTORY, col. 35, lines 40 to col. 34, line 37 & col. 36, lines 55- to col. 38 etc.);

d) editing for playback in trick mode (col. 10, lines 16-31) the digital stream using the history (col. 8, lines 7-18, "buffer history ... the buffer history is used when decoding ... such as reverse ... trick");

e) decoding the stream edited for trick playback (col. 8, "trick play mode, this approach increases the likelihood that

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the most potential useful data in a free buffer will be overwritten after less potential useful data in a free buffer is overwritten."), only a limited number of frames are in the buffer, therefore, frames after the buffered frames are reproduced from the medium and are decoded.

Regarding claim 2, Duruoaz further discloses maintaining and displaying a last decoded picture during the step e, trick play mode such as pause (see col. 10, lines 65- & col. 10, lines 16-30, trick play commands and col. 19, lines 4-, "repeatedly displayed").

Regarding claim 3, Duruoaz further discloses and meets the limitation of decoding invisible using two frame buffers (col. 8, lines 1-18, "When there are more than three frame buffers").

Regarding claims 5-7-10, 12-14, are analyzed and discussed with respect to the claims above, wherein Duruoaz provides for trick play modes, trick play mode controller, a memory for the history, associated with the transitions between modes and utilizing the history data to handle selecting frames between modes also see Figs. 1, 2, 3, 4, 6, 7, 8, 10, 11, 12, 15A, 15D, 16C, 16D, cols. 8-9, 19, 27, 34, 36.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and

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invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duruoz et al. (US 6,654,539).

Regarding claims 4 and 11, the examiner incorporates by reference the rejection of claims 4 and 11.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Fax Information

Any response to this action should be faxed to:

(571) 273-8300, for communication as intended for entry, this Central Fax Number as of 7/15/05

Contact Information

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record, Monday-Tuesday & Thursday-Friday, 8:00 AM to 5:00 PM Vincent F. Boccio (571) 272-7373.

Primary Examiner, Boccio, Vincent
1/21/07


VINCENT BOCCIO
PRIMARY EXAMINER

*Approved
Ves 11/21/07*

CUSTOMER NO.: 24498
Serial No. 09/640,104
Reply to Office Action dated: 7/31/06
Response dated: 10/16/06

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Amendments to the Drawings

The attached drawing sheet includes changes to Figure 2. This sheet, which includes Figures 1A, 1B and 2, replaces the original drawing sheet including Figures 1A, 1B and 2.

In Figure 2, a block with a reference number 5 has been added having a descriptive legend "frame buffers". Support for the addition of block 5, "frame buffers", can be found in the Applicant's Specification, specifically on page 6, lines 19-23.

Attachment: Replacement Sheet